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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/805,968	03/22/2004	Edward Starer		2606

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Edward Starer
72-11 Austin Street
Forest Hills, NY 11375

EXAMINER

FICK, ANTHONY D

ART UNIT	PAPER NUMBER
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1753

MAIL DATE	DELIVERY MODE
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09/21/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/805,968	Applicant(s) STARER ET AL.	
	Examiner Anthony Fick	Art Unit 1753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2 through 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 2 recites the limitation "the thermocouple portion" in line 1. There is insufficient antecedent basis for this limitation in the claim.
4. Claim 3 recites the limitation "the first thermopile" in line 1. There is insufficient antecedent basis for this limitation in the claim.
5. Claim 4 recites the limitation "the second thermopile" in line 1 and the limitation "third electromagnetic gas valve" in line 3. There is insufficient antecedent basis for these limitations in the claim.
6. For claims 2 through 4, applicant seems to be assuming a structure for the "improved thermopile construction" from claim 1. However, neither the claim nor the specification gives any kind of structure for this construction outside of the cylindrical type item in the figures. For this "thermopile construction" to have any structure, applicant would need to include such a structure within the claims, and the structure would need to be supported by the original specification for this application to avoid a new matter rejection.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1 through 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Grando et al. (U.S. 5,674,065).

Grando discloses an apparatus for controlling the temperature of an area and the flow of gas in an unvented gas appliance.

Regarding claim 1, figure 1 shows the apparatus capable of producing multiple EMF outputs and positioned in close proximity to a pilot flame. The figure shows the pilot flame, 11, a thermocouple, 12, and a thermopile 13. It is the position of the examiner that the combination of the thermocouple, 12, and thermopile, 13, within the same apparatus meets the requirements of an improved thermopile construction since applicant does not give a specific structural requirement for the improved thermopile construction. Grando discloses the thermocouple generates an EMF signal to control the main gas flow through a control valve, 20 in figure 1, a second EMF signal to control modulation of gas to the burner, 26, and a third signal to control the remote switching device, 28 (column 2, lines 40-67).

Regarding claim 2, Grando discloses the thermocouple generates 24-32 millivolts (column 2, lines 42-44).

Regarding claims 3 and 4, Grando discloses the thermopile generates 250 to 750 millivolts (column 3, lines 21-22). Due to the nature of a thermopile, the voltage generated by the thermopile will depend on the temperature gradient. The thermopile disclosed by Grando is capable of producing multiple EMF signals at different temperature gradients, including the 250 and 750 millivolts required by the claims. Since the apparatus of Grando has all the structural requirements of the claims, the reference is deemed to be anticipatory.

Regarding claim 5, figure 1 shows the thermopile apparatus is positioned in close proximity to the pilot flame.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Fick whose telephone number is (571) 272-6393. The examiner can normally be reached on Monday - Friday 7 AM to 4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1753

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Anthony Fick *AF*
AU 1753
September 15, 2007


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SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700